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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,550	06/16/2005	Naoki Anzai	42598-2900	5916

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EXAMINER

THOMAS, ERIC W

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,550

Applicant(s)

ANZAI ET AL.

Examiner

Eric W. Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-10 and 14-22 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 14, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein the binder of the separator comprises a compound with a vinyl group, and the content of the binder in the separator is 10 to 20% with respect to the total weight of the separator by immersing the capacitor element in hot water at a temperature of 60 to 1000C prior to the chemical repair.

Group II, claim(s) 2, 15, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein the separator contains as a binder 10 wt% or more of a compound with a vinyl group, and one or two compounds selected from acetylene diol and dimethyl lauryl amine oxide are added to the capacitor element.

Group III, claim(s) 3-6, 16-18, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, a borate compound is added to the capacitor element and heated, and a conjugate composed of a borate compound and the compound with a vinyl group is added to the capacitor element.

Group IV, claim(s) 7, 19, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and a conjugate composed of dodecylbenzenesulfonic acid and the compound with vinyl group is added the capacitor element.

Group V, claim(s) 8, 20, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and a conjugate composed of sodium naphthalene-sulfonate and the compound with a vinyl group is added to the capacitor element.

Group VI, claim(s) 9, 21, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and the capacitor element wound using this separator is immersed in a polyimide silicon

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solution to form a film composed of polyimide silicon and a compound with a vinyl group on the surface of an oxide film.

Group VII, claim(s) 10,22, drawn to a solid electrolytic capacitor/method of forming a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and the capacitor element wound using this separator is immersed in a polyimide silicon solution to form, on the surface of an oxide film, a film consisting of two layers, one of which is of a compound with a vinyl group and the other of which is formed thereon of polyimide silicon.

The inventions listed as Groups do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I is drawn to a solid electrolytic capacitor wherein the binder of the separator comprises a compound with a vinyl group, and the content of the binder in the separator is 10 to 20% with respect to the total weight of the separator by immersing the capacitor element in hot water at a temperature of 60 to 100°C prior to the chemical repair. Group II is drawn to a solid electrolytic capacitor wherein the separator contains as a binder 10 wt% or more of a compound with a vinyl group, and one or two compounds selected from acetylene diol and dimethyl lauryl amine oxide are added to the capacitor element. Group III is drawn to a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, a borate compound is added to the capacitor element and heated, and a conjugate composed of a borate compound and the compound with a vinyl group is added to the capacitor element. Group IV is drawn to a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and a conjugate composed of dodecylbenzenesulfonic acid and the compound with vinyl group is added to the capacitor element. Group V is drawn to a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and a conjugate composed of sodium naphthalene-sulfonate and the compound with a vinyl group is added to the capacitor element. Group VI is drawn to a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and the capacitor element wound using this separator is immersed in a polyimide silicon solution to form a film composed of polyimide silicon and a compound with a vinyl group on the surface of an oxide film. Group VII is drawn to a solid electrolytic capacitor wherein a compound with a vinyl group is added to the separator, and the capacitor element wound using this separator is immersed in a polyimide silicon solution to form, on the surface of an oxide film, a film consisting of two layers, one of which is of a compound with a vinyl group and the other of which is formed thereon of polyimide silicon.

2. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric W. Thomas whose telephone number is 571-272-1985. The examiner can normally be reached on Monday - Friday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ewt


ERIC W. THOMAS
PRIMARY EXAMINER 9/16/05